



## Review

# A review of drug-facilitated sexual assault evidence: An Irish perspective

Dermot McBrierty MSc, Clinical Biochemist <sup>a,\*</sup>

Andrew Wilkinson LLM, FFFLM, MRCGP, Lecturer in Forensic Medicine <sup>b</sup>,

William Tormey MD, PhD, Consultant Chemical Pathologist & Professor of Biomedical Sciences <sup>a,c</sup>

<sup>a</sup> Chemical Pathology, Beaumont Hospital, Dublin 9, Ireland

<sup>b</sup> Forensic and Legal Medicine, Department of Medicine and Medical Science, University College Dublin, Health Sciences Centre, Belfield, Dublin 4, Ireland

<sup>c</sup> University of Ulster & Consultant Chemical Pathologist, Chemical Pathology Dept., Beaumont Hospital, Dublin 9, Ireland

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## ABSTRACT

Drug-facilitated sexual assault (DFSA) is prevalent in Western society. There is a significant degree of confusion regarding the definition and prevalence of DFSA. It is a subject with medical, scientific and legal aspects. These facets are explored in this review through a detailed examination of published data. The legal issues are defined in the context of the Irish judicial system. Several key case-law studies are presented to aid in understanding unresolved difficulties that persist in this complex field of forensics. The aim of this paper is to aid individuals from disparate disciplines to increase their evidence base in the complex and evolving issue of DFSA.

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## 1. Introduction

Drug facilitated sexual assault (DFSA) is a sexual assault perpetrated on an individual who has lost the capacity to consent due to intoxication. It is a complex issue involving aspects from many disciplines, including forensic science, toxicology, medicine and the legal system. The complexity involved often leads to confusion regarding the definition of DFSA and its prevalence. This review discusses the definition of DFSA, the evidence regarding the prevalence in Ireland, the substances involved in numerous jurisdictions and the legal issues and case law in an Irish context.

## 2. Defining DFSA

The act of rape is defined in law in Ireland in the Criminal Law (Rape) Act, 1981 and in the Criminal Law (Rape) (Amendment) Act, 1990.<sup>1,2</sup> In general terms, rape is defined as unlawful sexual intercourse or certain sexual activity perpetrated on an individual where consent is not present, or where consent is not valid due to a lack of

capacity of that individual to consent. A lack of capacity can be due to age, mental capacity or due to intoxication.

Rape that is facilitated by alcohol, drugs or other intoxicants has previously been confused with what has been termed 'date rape'. The term 'date rape' was first coined by Karen Barrett in September 1982 in an article called 'Date Rape: A Campus Epidemic?' in Ms. Magazine.<sup>3</sup> Date rape can be a specific form of DFSA where the victim is on a date with the perpetrator. There are many other situations where drugs and alcohol may be used to facilitate a sexual assault. Terms such as 'date rape drugs' have been used to describe drugs that can cause biological effects that facilitate sexual assault. Drinks with intoxicating or inhibition-reducing drugs added in order to drug a potential victim have been called 'spiked drinks'.<sup>4,5</sup>

In general, there are three reasons why consent for sexual acts may be invalid. First, consent may be invalid due to the age of the individual. In all European jurisdictions an age of consent is defined. This age varies significantly between jurisdictions. Second, the individual may not be mentally capable of consenting. Third, the individual may be intoxicated and therefore may not have the capacity to consent. In DFSA, the inability to consent is due to incapacity or unconsciousness due to an intoxicating substance.<sup>6</sup> Consent given while under the influence of various drugs that do not render the individual unconscious or incapacitated may also be invalid. This has been shown to be the case where, for example, the

\* Corresponding author. Tel.: +353 1 8092673; fax: +353 1 8092435.

E-mail address: [dermotmcbrierty@beaumont.ie](mailto:dermotmcbrierty@beaumont.ie) (D. McBrierty).

individual has ingested MDMA (3,4-methylenedioxymethamphetamine, ecstasy). In these situations, the individual may feel more empathy towards others, act in a disinhibited manner and possess a heightened sexual desire. The individual may have taken the MDMA knowingly, thus leaving themselves prone to opportunistic DFSA. There are cases where the individual may have ingested the MDMA unknowingly.<sup>7</sup> The consent, if given, by the individual while under the influence of MDMA may be considered invalid in a court as the individual did not have the capacity to consent.<sup>8</sup>

DFSA has been described as the surreptitious administration of a drug for the purpose of facilitating non-consensual sexual intercourse. The drug is usually administered in a drink.<sup>9</sup> Others have included alcohol as one of the drugs used. The definition of DFSA can then be defined as sexual activity that occurs where consent for the activity is either absent or invalid due to the effects of drugs, which includes alcohol.<sup>10</sup> A further expansion of the substances that can be used in DFSA includes noxious substances or chemical agents that can be employed to facilitate sexual contact.<sup>7</sup>

There are three separate circumstances where DFSA can occur. These are where: (i) there is an involuntary ingestion of an intoxicating substance by the victim, (ii) there is both voluntary and involuntary ingestion of an intoxicating substance by the victim and (iii) there is voluntary ingestion of an intoxicating substance by the victim.<sup>11</sup>

Possibly the most comprehensive definition of DFSA comes from the (U.K.) Association of Chief Police Officers Operation Matisse report, produced in conjunction with the Forensic Science Service and Sexual Assault Referral Centres (SARCs) in 2006.<sup>12</sup> This report indicates that DFSA should be redefined as either proactive DFSA or opportunistic DFSA. Proactive DFSA involves the covert or forced administration of either an incapacitating substance or a disinhibiting substance to a victim. It is important to note that this definition includes administration of a 'disinhibiting' substance which may not render the victim sedated or unconscious, but may induce a state of consciousness that facilitates cooperation in sexual activity. Opportunistic DFSA is sexual assault that occurs when the victim has self-administered a substance (e.g., alcohol or recreational drugs) that facilitates an assault due to the profound intoxication of the individual. Opportunistic DFSA can occur when the victim is in a near-unconscious state or unconscious due to their own actions (Operation Matisse, 2006).

In summary, DFSA can be defined as sexual assault that is facilitated by alcohol, drugs or other intoxicating agents where consent cannot be obtained due to lack of capacity of the victim. This consent cannot be given due to intoxication or disinhibition due to the intoxicants and can be subdivided into proactive and opportunistic DFSA depending on the circumstances.

### 3. Prevalence of DFSA in Ireland

The prevalence of rape and DFSA in Ireland, and elsewhere, is not easy to estimate. There is a large degree of underreporting to the Gardai (the national police service of the Republic of Ireland). In the UK, it has been estimated that 85% of rape victims never report the offence to the police.<sup>13</sup> In Ireland, the Rape Crisis Network state in their 2007 summary report that less than one in five (17.7%) victims of rape reported the offence to the Gardai (Rape Crisis Network National Statistics 2007: Summary Report).<sup>14</sup> The Central Statistics Office (CSO) in Ireland provides crime statistics that include sexual offences. The rapes and sexual assaults that were reported to the Gardai between the years 2004 and 2007 are presented in Table 1.<sup>15</sup> The trend of the total number of rapes and sexual assaults reported to the Gardai between the years 2004 and 2007 is presented in Fig. 1.<sup>15</sup>

**Table 1**

Rapes and sexual assaults recorded by the Gardai from 2004 to 2007.

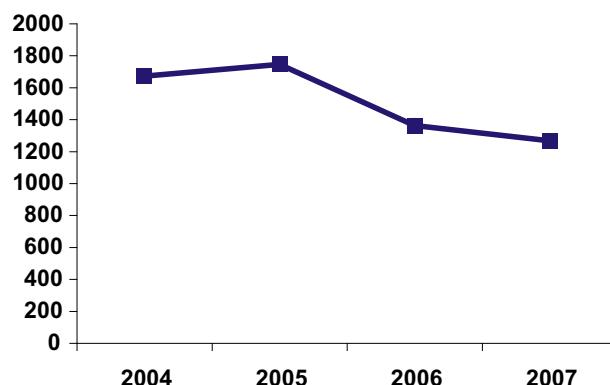
Offence	2004	2005	2006	2007
Rape of a male or female	409	447	367	352
Defilement of a boy or girl (<17 years old)	137	123	76	77
Sexual offence involving mentally impaired person	14	13	15	12
Aggravated sexual assault	14	7	16	17
Sexual assault (not aggravated)	1098	1156	888	809
Total rapes and sexual assaults	1672	1746	1362	1267

The reported sexual offences in Ireland would suggest that either the overall number of rapes and sexual assaults has decreased between 2004 and 2007, or simply that the number of offences reported has decreased. An estimate of the actual number of rapes and sexual assaults, based on the reporting rate estimated by the Rape Crisis Network (i.e., 17.7%), would be that in 2007 there were 7158 rapes and sexual assaults in Ireland. This is nearly 20 sexual offences per day. This number is still only an estimate. The number of phone calls received by Rape Crisis centres may be more indicative of the actual number of sexual offences occurring.

In 2007, the Dublin Rape Crisis Centre received 10,155 genuine counselling calls to their 24-h helpline. Of the calls received by the helpline about 47% were regarding child sexual abuse, 43% involved adult rape, 6.8% regarding adult sexual assault, 1% regarding sexual harassment, 2.3% regarding drug rape, 0.3% regarding ritual abuse and 0.4% were about suspected abuse. The callers comprised 83% females and 17% males (Dublin Rape Crisis Centre, 2007 Statistics).<sup>14</sup> The perpetrators of the offences, however, are male in the vast majority of cases. In 2007, the Dublin Rape Crisis Centre found that 96.2% of the alleged perpetrators of the sexual offences were male, 2.3% female and unknown in 1.5% of the cases.

The generally held perception by the public is that a rape occurs outdoors, at night and is perpetrated by a stranger. When the statistics are examined this is shown not to be the case. However, in court trials the jury often has this belief. The 2007 statistics from the Dublin Rape Crisis Centre also give the ages of the callers to their helpline and the relationship between the victims and the offenders, presented in Tables 2 and 3.

The statistics presented from the Dublin Rape Crisis Centre demonstrate that the victims of sexual assault have a wide age demographic and the offenders have a variety of relationships with the victims. The offenders are more likely known to the victims than being strangers. The 2007 statistics reveal that 2.3% of the calls received were regarding 'drug rape'. This figure gives the impression that the number of DFSA is small. This is misleading. There is



**Fig. 1.** Trends in total numbers of rape and sexual assaults recorded by Gardai between 2004 and 2007.

**Table 2**

The age of clients calling the Dublin Rape Crisis Centre Helpline.

Age	Percentage of callers
Under 15	2.46%
15–17	9.12%
18–29	40.53%
30–39	20.34%
40–49	17.06%
50–59	8.41%
60–69	1.92%
70+	0.16%

often confusion between 'date rape', 'drug rape' and DFSA. As stated earlier, DFSA can be defined as sexual assault that is facilitated by alcohol, drugs or other intoxicating agents where consent cannot be obtained due to lack of capacity of the victim. The most common substance involved in DFSA is alcohol, which is not included in the figures presented for 'drug rape'.

Numerous studies have found that ethanol is commonly found in victims of rape at levels that would indicate that the victim is unlikely to have had the capacity to consent. In a study in UK, 46% of victims of alleged DFSA had ethanol present.<sup>7</sup> In an Australian study, 77% of victims of alleged DFSA had ethanol present.<sup>10</sup> In a recent Swedish study, 55% of victims of alleged sexual assault had ethanol present.<sup>16</sup> In Ireland, alcohol is involved in about half of all adult sexual assaults.<sup>17</sup> This would indicate that the offence of DFSA is hugely underestimated in Ireland and elsewhere.

The problems associated with discovering the actual level of sexual abuse that is prevalent in Ireland was addressed in 2002 by the Sexual Assault and Violence in Ireland Report (SAVI Report) and through the follow-up report, SAVI Revisited, from 2005.<sup>17,18</sup> The research undertaken in SAVI and SAVI Revisited provides an invaluable source of information regarding the actual prevalence of sexual abuse and violence in Ireland.

The SAVI study obtained information from a suitably large cohort, consisting of 3120 individual adults. The demographics of the cohort in the study were broadly similar to the overall demographics of the general population. Previously, estimating actual numbers of sexual assaults was based on the number of individuals seeking assistance due to sexual assault either from the Gardai or from centres such as the Dublin Rape Crisis Centre. The results in the SAVI Report demonstrate the gross underreporting of sexual abuse in this country.

The SAVI Report revealed a lifetime prevalence of sexual violence of 42% in women and 28% in men. Of the women who were interviewed 58% reported no abuse, 10% reported penetrative abuse, 22% reported contact/attempted penetrative abuse and 10% reported non-contact abuse (Fig. 2). Of the men who were interviewed 72% reported no abuse, 3% reported penetrative abuse, 18% reported contact/attempted penetrative abuse and 7% reported non-contact abuse (Fig. 3).

**Table 3**

Relationship between victim and offender in cases of rape/sexual assault (where known).

Relationship to victim	Percentage of cases
Stranger	48.26%
Other known person	33.52%
Boyfriend	6.65%
Other male relative	5.78%
Husband/partner	4.34%
Father	0.87%
Brother	0.29%
Date rape	0.29%

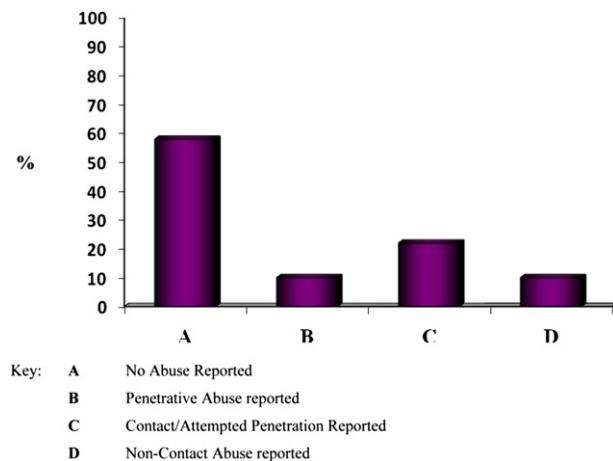


Fig. 2. Lifetime prevalence of sexual abuse/violence in the Irish female population (adapted from the SAVI Report, 2002).

The report found that child sexual abuse was very prevalent in Ireland. Sexual abuse that was experienced by individuals below the age of 17 years was defined as child sexual abuse. In Ireland, the legal age of consent is 17 years; 20.4% of girls had experienced contact sexual abuse and a further 10% had experienced non-contact sexual abuse. The most serious form of sexual abuse is penetrative sexual abuse. It was found that 5.6% of all girls had suffered penetrative sexual abuse; 16.2% of boys had experienced contact sexual abuse; and a further 7.4% had experienced non-contact sexual abuse. Regarding boys, 2.7% had suffered penetrative sexual abuse. These figures indicate the extent of the problem of child sexual abuse in Ireland, with about one in three girls under 17 and one in four boys under 17 suffering some form of sexual abuse.

The prevalence of adult sexual assault, as defined by the report as sexual assaults on individuals aged 17 or older (i.e., individuals over the legal age of consent), is also high in Ireland: 20.4% of females interviewed reported contact sexual assault, with a further 5.1% reporting unwanted non-contact sexual experiences; 6.1% of the women surveyed reported adult penetrative sexual assault. With respect to males, 9.7% interviewed reported contact sexual assault, with a further 2.7% reporting unwanted non-contact sexual experiences; 0.9% of the men surveyed reported adult penetrative

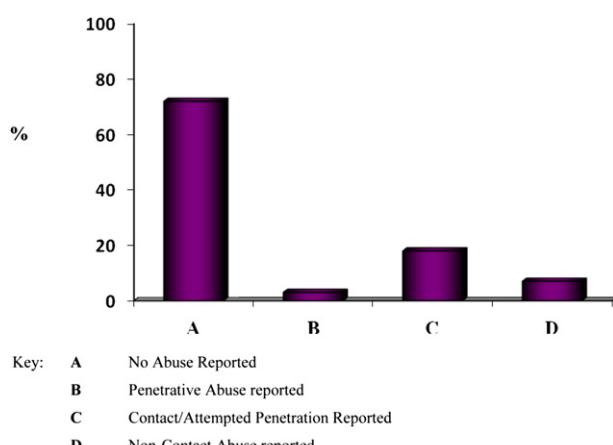


Fig. 3. Lifetime prevalence of sexual abuse/violence in the Irish male population (adapted from the SAVI Report, 2002).

sexual assault. These figures indicate the extent of underreporting of sexual assaults in this country.

There is a commonly held perception that sexual assaults are carried out by strangers. The SAVI Report provided information on the relationships between the perpetrators of the sexual assault and the victims (Table 4). The information obtained demonstrates that the abuser is usually not a stranger, with about one in three cases of unwanted sexual experiences being associated with strangers in men and about one in five cases associated with strangers in women.

The method of collecting data for the SAVI Report was conducive to obtaining accurate information that may not have been offered by the individuals in other circumstances. Nearly half (47%) of those surveyed had never disclosed the sexual abuse to anyone before the SAVI survey. The sexual abuse was more likely to be reported to someone when it was perpetrated by a stranger. This would indicate why the statistics reported by the Dublin Rape Crisis Centre would show that strangers were responsible for 48% of sexual assaults, where the SAVI Report indicates that strangers are responsible for 31.7% of sexual assaults on men and 21.1% of sexual assaults on women.

The Gardai statistics indicate that in 2007 there were 1267 cases of rape and sexual assault recorded.<sup>15</sup> The Rape Crisis Network statistics indicated that only 17.7% of their callers reported the sexual assault to the Gardai.<sup>14</sup> As stated earlier, this would mean that the real number of indictable sexual offences that occurred in Ireland in 2007 was 7158 rather than the number actually recorded by the Gardai, of 1267. However, the number of incidents reported to the Gardai by the callers to the Rape Crisis Centres may not be the most accurate indicator. This figure is based on the individuals who already had the courage to call the Rape Crisis Centre. The SAVI Report indicated that nearly half of the individuals who had been sexually abused had never told anyone, including a Rape Crisis Centre. The report also discovered that only 1% of the men who had suffered sexual abuse had reported it to the Gardai, while only 7.8% of women had reported the abuse to the Gardai. If the figures of reporting to the Gardai from the SAVI Report for women are used, the actual number of indictable sexual offences in 2007 is more likely to be 16,243 (where we assume that the 1267 offences reported to the Gardai is a mere 7.8% of actual cases). This figure is likely to be higher when we consider that the SAVI Report indicates that while 7.8% of women had reported the sexual assault to the Gardai, only 1% of men had reported the abuse to the Gardai.

The SAVI Report also provides us with another method of estimating the prevalence of sexual abuse in Ireland. The last census of the Irish population from 2006 found that there were 2,121,171 men and 2,118,677 women in the country (Central Statistics Office figures).<sup>19</sup> The SAVI Report uncovered lifetime prevalence rates of sexual abuse (Figs. 2 and 3). When we apply the rates of sexual abuse to the number of individuals in the country, we can get an estimation of the number of individuals in the country that have

suffered sexual abuse over their lifetimes. These estimations demonstrate the extent of the problem. The estimates indicate that in 2006 there were nearly 900,000 women and 600,000 men living in Ireland who had suffered some form of sexual abuse/violence during their lifetimes (Table 5).

The definition of DFSA that is generally accepted and is being used here incorporates any intoxicating substance that may render consent unobtainable due to an inherent lack of capacity of the intoxicated individual. In general terms, this involves an individual consuming drink and/or drugs. As has been stated earlier, international studies in Australia, Sweden, the U.K. and elsewhere all indicate that drugs can be present and that alcohol is often present in cases of adult sexual assault.<sup>7,10,16</sup> The SAVI Report also ascertained that alcohol is often present and drugs are sometimes present in cases of adult sexual assault. The consumption of alcohol and/or drugs during situations where sexual assault has occurred is presented in Table 6. This table indicates that in about half of all cases of adult sexual assault there was alcohol involved. The situation where the victim of the assault was consuming alcohol was 38.6% for men and 29% for women (adding the figures for both individuals consuming alcohol to the figures for only the victim consuming alcohol). These figures would indicate, when used with the information presented in Table 5, that in 2006 there were '258,055' women and '229,256' men who had been victims of what could be defined as a DFSA within their lifetimes. However, it is important to take into consideration the legal stance that is often taken that consent while self-intoxicated with alcohol is still considered 'consent'; "drunken consent is still considered consent" (see *R v Bree*, 2007, discussed later in this review).<sup>34</sup>

It is important to note that the SAVI figures are based on the victims' knowledge of the event. The actual amounts of alcohol involved are uncertain and the number of cases where the victim has been given alcohol without their knowledge is unknown. Further, the low levels of drugs believed to be involved may not reflect the actual amount involved as there may be numerous cases where drugs have been given to the victim without their knowledge. It is certain that there are many cases of opportunistic DFSA presented in these statistics, but the level of proactive DFSA may not be reflected. The drugs believed to be involved in DFSA and the issues surrounding their prevalence and detection will be briefly discussed. However, it is clear that the level of DFSA, opportunistic and proactive, is significantly high in Ireland.

#### 4. International evidence regarding the substances involved in DFSA

There has been much anecdotal reporting of 'date rape' facilitated through the use of 'date rape drugs' in the media. Over the past couple of decades, there have been numerous international scientific studies that attempt to analyse and quantify the issue.

**Table 5**

Actual numbers of individuals estimated to have been subjected to sexual abuse/violence, based on SAVI report and 2006 population census.

Type of sexual abuse/violence	Female		Male	
	% of population	Actual number	% of population	Actual number
None	58	1,228,833	72	1,527,243
Some form of sexual assault/violence	42	889,844	28	593,928
Penetration	10	211,868	3	63,635
Contact/attempted penetration	22	466,109	18	381,810
Non-contact sexual abuse	10	211,868	7	148,482

**Table 4**

Relationship of sexual abuser to victims in adult sexual abuse (adapted from the SAVI Report, 2002).

Relationship of abuser	Men (%)	Women (%)
Stranger	31.7	21.2
Friend	21.8	11.8
Acquaintance known for more than 24 h	20.4	15.0
Acquaintance known for less than 24 h	6.3	8.9
Neighbour	4.9	3.8
Co-worker	4.9	6.8
Spouse/partner	0.7	4.4
Ex-partner	0.7	2.7
Boyfriend/girlfriend	0.0	16.5
Male relative	0.0	4.1

**Table 6**

The involvement of alcohol and drugs in cases of adult sexual assault, where ingestion is known (adapted from the SAVI Report, 2002).

	Men (% of cases)	Women (% of cases)
Alcohol involved	52.6%	45.3%
Only victim drinking	5.8%	3.0%
Only abuser drinking	13.9%	16.3%
Both individuals drinking	32.8%	26.0%
Drugs		
Only victim using	1.4%	0.9%
Only abuser using	0.0%	1.8%
Both individuals using	2.9%	0.6%

#### 4.1. USA

A study from the USA in 2000 analysed 2003 urine samples from alleged victims of sexual assault.<sup>20</sup> It found that 63% of samples had alcohol present, 30% had tetrahydrocannabinol (THC) present and a large subset of the samples had one or more of a wide variety of drugs present. However, the two most reported 'date rape drugs', namely gamma-hydroxybutyric acid (GHB) and flunitrazepam, were present in less than 3% of the samples.

#### 4.2. UK

In the UK, one study from 2001 analysed 3303 urine samples from alleged victims of DFSA.<sup>21</sup> It found that 67% had alcohol present, 30.3% had THC present (with 9.6% having THC alone), 4.8% were positive for benzodiazepines, 2.8% positive for cocaine, 1.9% positive for amphetamines, 0.69% positive for opiates, 0.54% positive for barbiturates and 0.3% positive for propoxyphene.

Another and more recent study from the UK tested 1014 urine samples from victims of alleged DFSA from the years 2000, 2001 and 2002.<sup>7</sup> This study found that 46% were positive for alcohol, 26% positive for THC, 11% positive for cocaine and in 2% of the cases a sedative or disinhibiting drug was detected that had not been admittedly ingested (including MDMA, GHB, diazepam and temazepam).

#### 4.3. Sweden

A Swedish study from 2008 tested 1806 samples from victims of alleged rape.<sup>16</sup> It found that 31% of samples tested had no alcohol or drugs present. It is important to note that this study was not limited to those individuals who alleged DFSA, but included all rape allegations. However, it was found that 43% of samples tested were alcohol positive, 12% had alcohol and at least one drug present and 15% were positive for drugs alone (no alcohol detected). The drugs detected were varied and included both licit and illicit drugs. This study found that the average blood alcohol content (BAC) at time of sampling was 129 mg%, with back extrapolation leading to the conclusion that the average BAC at the time of the alleged rape was 199 mg%.

#### 4.4. Australia

In Australia, a study from 2006 examined 434 cases of sexual assault in the state of Victoria.<sup>10</sup> This study included an analysis of interviews of the alleged victims of the assaults; 77% of the alleged victims reported having ingested alcohol prior to the event. Seventy-six of the cases alleged DFSA (17.5%). Of the cases that alleged DFSA, 20% tested positive for at least one drug where the individual reported not to have taken the drug knowingly. The unexpected positive results included drugs such as benzodiazepines (most commonly), MDMA, THC, venlafaxine, tramadol,

citalopram and codeine. This report does include issues that are common to all the studies that may influence the apparent rates of DFSA. It notes that late reporting of the alleged sexual assault causes issues with toxicological testing. The median time for reporting the assault in these cases was 20 h. This elapsed time can lead to an underestimation of drug and alcohol positives at the time of the assaults. It also noted that some cases were not included in the study due to the withdrawal of the allegations, or not being reported in the first instance. Other issues with testing were also noted, such as the methods used for testing (i.e., not all potential DFSA substances being tested for due to the laboratory limitations).

#### 4.5. Northern Ireland

There have been studies in Northern Ireland of drugs and alcohol present in cases of alleged DFSA.<sup>22,23</sup> The studies found that of the years between 1999 and 2005, the number of samples positive for alcohol, drugs, or both rose from 66% to 78%. The back-calculated BAC in 1999 averaged at 218 mg% (range: 105–304 mg%). In the Republic of Ireland, the SAVI Report would indicate that alcohol is a factor in around half of all rapes.<sup>17</sup>

A systematic review of the involvement of alcohol and drugs carried out by Beynon et al. examined 11 international studies (seven from the USA, three from France and one from the UK).<sup>24</sup> This review found that 10 of the studies failed to exclude voluntary consumption of alcohol and drugs from their interpretations. The only study identified by Beynon et al. as unbiased was by Scott-Ham and Burton (discussed previously in this article).<sup>7</sup> This exclusion of voluntary consumption of intoxicants may not be warranted as DFSA can be either proactive or opportunistic.

Overall, all the international studies would indicate that alcohol is by far the most common substance involved in DFSA. The number of licit and illicit drugs involved in DFSA is large, with the main drugs involved being benzodiazepines, THC, non-benzodiazepine hypnotics, GHB, amphetamines, MDMA, cocaine, ketamine, barbiturates, opioids and various over-the-counter (OTC) medications. The ability to detect these substances varies between laboratories and techniques employed. Further, the time frames within which these substances can be detected vary greatly.

#### 5. Laboratory analysis of the substances involved

In any case of suspected DFSA, it is very important to test for the drugs in an appropriate manner. Most hospital laboratories do not test samples in a medico-legal manner. There are several issues that need to be considered with regard to DFSA cases. First, there needs to be a preserved chain of custody record for each sample that is to be analysed. In a situation where the chain of custody for the sample is broken, the results are unlikely to stand up to scrutiny in a court of law. Second, the time within which the samples are taken from the alleged victim is important. Samples need to be taken in as timely a manner as possible while the drugs involved are still detectable. This is especially relevant with drugs such as GHB and ethanol, which clear rapidly from the body. It is important to keep in mind that a negative result may be due to the time elapsed since the alleged ingestion of the intoxicating or the disinhibiting substance and not because it was never present. The standard matrix for analysis of drugs of abuse is urine and the length of time that the drugs can be detected in urine is presented in Table 7.<sup>25</sup> This is not an exhaustive list of potential drugs used in DFSA, but it highlights the fact that some of the common drugs implicated have relatively short detection time windows.

Third, the method of analysis of the samples is important. The standard method in most laboratories for testing samples for drugs is through the use of immunoassay. It is suitable for high-

**Table 7**

The length of time that drugs of abuse can be detected in urine (adapted from Moeller et al., 2008).<sup>25</sup>

Drug	Time detectable
Alcohol	7–12 h
Short-acting barbiturates	24 h
Long-acting barbiturates	3 weeks
Short-acting benzodiazepines	3 days
Long-acting benzodiazepines	30 days
Cocaine	2–4 days
THC	3 days to >30 days (depending on frequency of use)
Opioids – Codeine	48 h
Opioids – Heroin	48 h
Opioids – Hydromorphone	2–4 days
Opioids – Methadone	3 days
Opioids – Oxycodone	2–4 days
Opioids – Propoxyphene	6–48 h

throughput analysis and is less technically demanding than other methods. It is also cost effective relative to the other methods of analysis. Tests that obtain a positive result through immunoassay are presumptive positives until they are confirmed by either gas chromatography–mass spectrometry (GC–MS) or by high-performance liquid chromatography (HPLC).<sup>25</sup> In legal terms, GC–MS is the preferred choice and immunoassays may not hold up in court due to the potential for cross-reactivity that is inherent in assays that utilise antibodies. The potential for false positive is always present when using an immunoassay. For example, pseudoephedrine is a common cause for false positive results from amphetamine immunoassays. Pseudoephedrine is a common medication found in decongestants available over the counter. Another occurrence through the use of immunoassays is a false positive for opioids when an individual has consumed poppy seeds.<sup>26</sup> Therefore, interpretation skill is necessary when immunoassays are used, and in medico-legal cases confirmatory testing using a more precise method such as GC–MS is warranted.

It is clear from the numerous studies performed over the past couple of decades that there are many substances involved in cases of DFSA. It is important to note that the list of substances involved in cases of DFSA is extensive and varies from location to location depending on the local availability of intoxicating substances. In cases of proactive and opportunistic DFSA, any substance that renders the victim of the assault disinhibited, intoxicated, suffering from memory loss or more susceptible to the assault may be involved.

Forensic, medical and scientific staff involved in cases of alleged DFSA should be aware of the potential substances involved and be aware that any time delay in presentation of the individual may lead to false negative results when testing for substances alleged to be involved in DFSA. This is especially important when ethanol and GHB are suspected as they are eliminated from the body rapidly.

## 6. DFSA and Irish law

DFSA can be a complicated legal version of rape. The legislation regarding rape applies. There are, however, many other laws that are relevant to this crime. There are criminal issues to be considered including sexual assault, assault, poisoning, endangerment, possibly false imprisonment and even murder or manslaughter charges. Special considerations include the age and sex of the victim and the mental health of the victim. The application of the legislation will depend on the specific situation and incident that has occurred. In Ireland, rape and sexual assault are defined in the Criminal Law (Rape) Act 1981 and in the Criminal Law (Rape) (Amendment) Act 1990.<sup>1,2</sup> The legislation regarding rape in Western countries is broadly similar.

The issue of consent is critical to the crimes of rape and sexual assault. The Criminal Law (Rape) Act, 1981 has consent as the key issue in the meaning of rape. Rape is committed when consent is absent. This may be if the individual does not consent or where there is recklessness as to whether consent is present. It is important to note that there are numerous situations where consent may be given, but is invalid. These surround an individual's capacity to consent. Consent may be invalid due to the age of the individual, the mental status of the individual or due to intoxication.

Mental capacity is not clearly defined in Irish legislation. The U.K. has a similar legal structure to the Irish jurisdiction. In the U.K., The Mental Capacity Act 2005 provides definitions and guidelines regarding capacity to consent.<sup>27</sup> Section 2 (1) of the Act defines in law the people who can be considered to lack capacity:

“a person lacks capacity in relation to a matter if at the material time he is unable to make a decision for himself in relation to the matter because of an impairment of, or a disturbance in the functioning of, the mind or brain.”

Section 2 (2) states that “It does not matter whether the impairment or disturbance is permanent or temporary.” These statements are very specific and can be applied to any situation where an individual's capacity is in question. The sections of the Act can be applied to situations where an individual may not be considered to have the capacity to consent to sex. Intoxication may be a cause of reduced capacity to consent. Section 2 (2) is very important in a situation where an individual is intoxicated for only for a short period of time, with no lasting impairment in capacity.

Section 3 also defines an ‘inability to make decisions’. It defines an individual as being unable to make a decision (e.g., unable to have the capacity to consent to a sexual act) where the individual is unable:

- (a) to understand the information relevant to the decision,
- (b) to retain that information,
- (c) to use or weigh that information as part of the process of making the decision, or
- (d) to communicate this decision (whether by talking, using sign language or any other means).

Importantly, the Act also defines the ability to foresee the consequences of making a decision as being relevant to an individual's ability to make a decision [Section 3 (4)]. With specific reference to where an individual is intoxicated, this Act can be used to define a situation where an individual would be deemed as not having the capacity to make a decision regarding consenting to a sexual act. Intoxication due to alcohol and/or drugs would very easily constitute a situation where there would be an impairment or disturbance in the functioning of the brain or mind (as defined in Section 2 (1)). Intoxication could also impair an individual's ability to understand, retain, weigh up, communicate decisions and understand the consequences of a decision (as defined in Section 3). This Act is therefore a well-defined legal protection for individuals who may not have capacity to consent to sexual acts due to intoxication.

The issues surrounding consent, with regard to rape, need to be specified in legislation. Stephen Schulhofer, a professor of law at NYU, stated that “in rape law, flexibility almost inevitably means under enforcement and non-compliance”.<sup>28</sup> In the U.K., and Ireland, rape is most often defined around the concept of consent. This is despite the fact that consent is not well defined and is usually left up to a judge to define. In Section 74 of The Sexual Offences Act 2003 (UK), consent is defined as occurring when the person “agrees by choice, and has the freedom and capacity to make that choice”.<sup>29</sup> Importantly, Section 75 of the Act goes a little further in clarifying the circumstances that consent may be evidentially taken as being

present or absent. It stipulates that it is evidential that consent is not present and that the defendant was aware that consent was not present in cases where:

- (a) there was violence or fear of immediate violence,
- (b) there was fear of violence to another person,
- (c) the complainant was unlawfully detained,
- (d) the complainant was asleep or unconscious,
- (e) the complainant was unable to communicate consent due to a physical disability and
- (f) the defendant administered an agent that "stupefied or over-powered" the complainant.

These legal definitions are very relevant to situations of alleged DFSA. The victim of DFSA may be asleep or unconscious or unable to communicate consent. This can occur in cases of proactive or opportunistic DFSA. In cases of proactive DFSA, the administration of the agent that stupefies or overpowers is clearly stated here as nullifying any consent. The broad use of the word 'agent' here also allows for legal interpretation of any substance, including alcohol and/or drugs.

In Irish legislation, the Criminal Law (Rape) Act, 1981, defines rape around the concept of consent. Section 2(1)(a) defines rape as having occurred where the individual "does not consent to it" (i.e., intercourse), and in Section (1) (b) that the individual "knows she does not consent"..."or he is reckless as to whether she does or does not consent." The legislation puts the decision regarding whether or not the consent was present and whether the man believed there was consent, or was reckless in the belief, down to the jury in the trial (Section 2 (2)). There are few specifics presented in Irish legislation guiding the judges and juries in these regards, such as the Acts in law in the UK (e.g., The Mental Capacity Act, 2005 and The Sexual Offences Act, 2003). However, The Criminal Law (Rape) (Amendment) Act, 1990, Section 9 states that "any failure or omission by that person to offer resistance to the act (*sexual assault*) does not in itself constitute consent to the act." This addresses one of the issues regarding the need for an explicit statement of lack of consent.

The Law Reform Commission (LRC) has produced recommendations and consultation papers that give guidance to the legislature on the issue of consent and capacity. In 2005, the LRC produced the Consultation Paper on Vulnerable Adults and the Law: Capacity (LRC CP 37 – 2005).<sup>30</sup> This consultation paper on capacity is relevant to assessing capacity in cases of DFSA. A victim of DFSA may be considered a vulnerable adult with regard to their potential lack of capacity to consent.

Capacity can be seen as "the pivotal issue in balancing the right to autonomy in decision making and the right to protection from harm."<sup>31</sup> There are several methods of assessing capacity, none of which is used exclusively in legal situations.

## 7. The status approach to assessing mental capacity

The status approach involved deciding on an individual's mental capacity based on the presence or absence of certain characteristics. This generally involves their capacity being based on a specific disability. This method does not assess capacity with regard to a specific time or decision. The status approach does not work well in cases where an individual has fluctuating capacity, which is generally the case with regard to DFSA and intoxication.

## 8. The outcome approach

The outcome approach to capacity assesses an individual's capacity on the results and consequences of their decision-making choices. If the decisions taken by the individual produce

consequences that do not match conventional wisdom and widely held values, the individual is considered to lack capacity.<sup>32</sup> The Law Commission of England and Wales and the LRC in Ireland do not favour this approach.<sup>30,33</sup> This method of assessing capacity is not favoured because it "penalises individuality and demands conformity at the expense of personal autonomy." This is reflected in Ireland by the LRC in their consultation paper where they state that "failure to make prudent or sensible decisions should not of itself lead to a characterisation of a person as lacking capacity since a badge of capacity is the right to make decisions autonomously in whatever manner one chooses within the confines of the law."

## 9. The functional approach

The functional approach is the most widely accepted capacity assessment model. This approach assesses an individual's ability to make a specific decision at a specific time, that is, capacity is both time-specific and issue-specific. This approach appears to be the best method for assessing capacity in cases of alleged DFSA. An individual may normally have the capacity to consent, but may lose that capacity at a specific time due to intoxication.

There is not a definition of capacity in law (common or statute) that is universally applicable. In general, an individual is legally presumed to possess capacity. Therefore, the burden of proof is to demonstrate that capacity is lacking. The standard of proof for a lack of capacity is that used in civil proceedings, that is, on the balance of probabilities.<sup>30</sup> The LRC states in the consultation paper that it approves of the characterisation of capacity put forward by Gordon and Verdun-Jones which characterises capacity and incapacity as "extremes on a continuum."<sup>34</sup>

## 10. Important case law

The Irish jurisdiction has a common law legal system that originates from the English system. The common law system of justice places emphasis on previous court decisions, referred to as 'stare decisis' ('let the decision stand') or case law. Rulings in previous court cases set a precedent for future cases with similar legal circumstances. The Irish courts are therefore bound by previous decisions. Ireland is a relatively small jurisdiction and in specific situations where there is no case law present it is often appropriate to consider how case law has been formed in other similar jurisdictions where common law applies. English case law is the nearest template, and while the decisions reached there are not binding in Irish courts they can be indicative of what case law rulings may be reached in Irish courts.

### 10.1. Capacity to consent while intoxicated – *R v Bree* (U.K.) (2007)<sup>35</sup>

One important piece of case law in this regard is *Regina vs Bree* (2007). This case from the U.K. dealt with an individual's capacity to consent to sex after consumption of significant amounts of alcohol. In this case, the complainant had voluntarily consumed a large quantity of alcohol and had subsequently had sex with the defendant. The defendant was convicted of rape under The Sexual Offences Act, 2003. However, on appeal, the Appeal Court overturned the conviction. The court stated that the initial trial judge had not directed the jury correctly in relation to the significance of intoxication in relation to consent. Section 74 of the 2003 Act defines a lack of consent where capacity is diminished due to intoxication. However, the appeal court indicated that while consent dissipates before an individual reaches unconsciousness it may still be present. The individual may have capacity to consent even after consuming a large quantity of alcohol. The court also

indicated that there could not be a prescribed level of alcohol where capacity to consent disappears. Individuals have varying capacity to deal with alcohol and even have a differing ability from day to day. The outcome of this case can be summed up and the law encapsulated in the phrase: “a drunken consent is still consent”. The judge (Sir Igor Judge P) stated that “the phrase lacks delicacy, but, properly understood, it provides a useful shorthand accurately encapsulating legal position.”

There are issues regarding the Bree decision. First, there could be an interpretation that “drunken consent is still consent” could apply to both voluntary and involuntary intoxication. There is also an issue about when exactly capacity to consent does disappear. There is no defined level given in law for alcohol, or any drug, where consent cannot be given due to a lack of capacity. This decision is due to the specific trial judge, and therefore will vary from case to case. It is clear that judges are reluctant to give specific guidance with regard to what constitutes consent in these cases. It is unlikely that a clearly defined definition of when intoxicated consent is still an acceptable form of consent will be forthcoming. It is a very complex legal, moral, ethical and medical issue that may never be fully resolved.

#### 10.2. An honest belief that consent is present – *R v Morgan (U.K.) [1975]*<sup>36</sup>

In this case, Morgan and three men were drinking. The three defendants subsequently had sexual intercourse with Morgan's wife, with his permission. They told the jury that Morgan had told them that whenever she struggled during sexual intercourse she was enjoying herself. The defence being put before the jury was that they did not have intent (i.e., the *mens rea*) to commit the rape and that they honestly believed that Morgan's wife was struggling with them and enjoying it.

*Mens rea* is required for a rape conviction and must be proven by the prosecution. The House of Lords held that a defendant genuinely believed that there was consent, even when this belief was not the case, the defendant could not be guilty of rape. However, in this case the defence was not considered reasonable.

#### 10.3. A defence of lack of *mens rea* due to self-induced intoxication – *DPP v Majewski (U.K.) [1977]*<sup>37</sup>

In this case, the defendant was self-intoxicated with alcohol and drugs. Majewski committed a series of assaults while intoxicated. A defence was put forward that due to the intoxication the defendant there was no intent or *mens rea*. The ruling was that intoxication was not a defence. However, in certain cases where *mens rea* needed to be present it may be the case that if a defendant cannot form specific intent due to intoxication it is not present.

#### 10.4. Is drunkenness a defence for offences of specific intent – *R v Caldwell (U.K.) [1982]*<sup>38</sup>

Caldwell, a disgruntled former employee of a hotel, became self-intoxicated with alcohol and set fire to the hotel in which he had worked. When he set fire to the hotel, there were guests staying there. The defence to the serious charges involving endangering human life, and not just arson, was that he was not aware there were people within the hotel at the time and therefore he did not have specific intent.

The court stated that the individual was reckless. The court defined this type of recklessness as occurring when:

- (a) the individual performs an act which creates an obvious risk that property will be destroyed or damaged and

- (b) when the act is performed the individual has not given any thought to the possibility of there being that risk or has recognised the risk and proceeded to perform the act anyway.

This defining of recklessness while intoxicated by alcohol by Lord Diplock in this case basically defines the act to be considered reckless by a court if a reasonable person would have found it obvious. This has repercussions with regard to any case of sexual assault with regard to recklessness (i.e., recklessness in obtaining consent).

#### 10.5. Is consent to sex present where there is no evidence of the complainant being physically overpowered – *R v Olugboja (U.K.) [1982]*<sup>39</sup>

The defendants in this case had sex with two teenage girls. There was no evidence of force, fear or fraud in the time leading up to the sexual intercourse. However, the ruling found that girls in the case submitted to sex through fear and submission to sexual intercourse is not the same as consent to sexual intercourse.

This case provides some guidance to juries (and judges) regarding consent. In *R v Olugboja*, Dunn states, with regard to consent, that “what this should be will depend on the circumstances of each case.” Furthermore, “in the... type of case where intercourse takes place after threats not involving violence or the fear of it... we think that... a jury will have to be... directed to concentrate on the state of mind of the victim immediately before the act of sexual intercourse, having regard to... their combined good sense, expertise and knowledge of human nature and modern behaviour to all the relevant facts of the case.”

This direction by the court can be seen as stating that common sense must be used by juries to decide if consent was not present due to a mind set of fear on the part of the complainant.

#### 10.6. A complainant cannot recall giving consent – *R v Dougal (U.K.) [2005]*<sup>40</sup>

This recent case involved a student who claimed to have been raped while intoxicated by a campus security guard. The complainant stated that there was no way that she would have consented to sex with the man who was a stranger to her. However, due to her level of intoxication she could not remember whether she had agreed to have sex with the defendant. During the trial, the judge then directed that the jury enter a ‘not guilty’ verdict because the prosecution could not proceed any further as they were unable to prove that she had not given consent due to her level of intoxication.

This case brings up many concerns about intoxicated victims of DFSA. The burden of proof required in a criminal court may not be reached due to the victim's inability to remember facts surrounding the incident. As far as the law is concerned, in most cases, “drunken consent is still consent.”

### 11. Conclusions

DFSA is a serious problem both in Ireland and in the wider international community. The reporting of crimes of sexual violence is low internationally, and very low in Ireland. The education of frontline service providers who come into direct contact with victims of alleged DFSA would be a positive step towards dealing with the issue. An obvious issue is that this is a cross-disciplinary concern, with aspects involving forensics, science, medicine and the law. Professionals who deal with the alleged victims need to be able to care for the individuals while maintaining an awareness of the legal and forensic concerns involved. Education of the general population is recommended. A

basic understanding of the risks to the population and some basic advice on what to do if a case of DFSA is suspected would lead to better care of the victims and would aid in reporting and prosecution of these assaults.

There are many intoxicants involved in DFSA cases. The international studies demonstrate the numerous drugs involved, including a significant proportion of rape and sexual assault cases that involved alcohol. The detection of the numerous drugs and production of legally applicable results is a complex issue with many pitfalls that become apparent in the legal arena. Frontline staff need to be educated as to the potential drugs involved so that the victims can be cared for in an appropriate manner. The staff should also have the backup of medical and scientific staff with the resources and knowledge to detect the potential drugs involved. The samples obtained, the chain of custody and the methods of analysis used should be legally defensible in any subsequent court case.

The legislation and case law concerning DFSA is often complex with much of the case law regarding the key concept of capacity to consent. The LRC has put forward recommendations regarding capacity, and government policy makers should legislate to clarify the concept of capacity using these recommendations. It is worthwhile to consider enacting legislation similar to the Mental Capacity Act, 2005 that is present in the U.K.

Further research is warranted into this complex and sensitive subject. The definition of DFSA that has been suggested by the Association of Chief Police Officers in the Operation Matisse Report should be adopted. The defining of DFSA as either proactive or opportunistic should be used. Future research would benefit from adopting these definitions in the context of assessing both the prevalence of DFSA cases and the substances involved. Research that subdivided DFSA into proactive and opportunistic would certainly aid in policy determination for the treatment of victims, education of the professionals and guidance to the legal system.

#### Ethical approval

We confirm that we have given due consideration to the protection of intellectual property associated with this work and that there are no impediments to publication, including the timing of publication, with respect to intellectual property. In so doing we confirm that we have followed the regulations of our institutions concerning intellectual property.

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#### Conflict of interest

There are no conflicts of interest.

#### References

1. *Acts of the Oireachtas, criminal law (rape) act, 1981*. Available from: <http://www.irishstatutebook.ie/1981/en/act/pub/0010/index.html>; 6 May 1981.
2. *Acts of the Oireachtas, criminal law (rape) (amendment) act, 1990*. Available from: <http://www.irishstatutebook.ie/1990/en/act/pub/0032/index.html>; 18 December 1990.
3. Smith MD, editor. *Encyclopedia of rape*. Westport, CT, USA: Greenwood Press; 2004. p. 242.
4. Walby S, Allen J. *Domestic violence, sexual assault and stalking*. In: *Home office research study 276*. London: Home office research, Development and Statistical Directorate; 2004.
5. Rawlins M. *Drug facilitated sexual assault. A report by the advisory council on the misuse of drugs*. London: Home Office; 2007.
6. Payne-James J, Busuttil A, Smock W, editors. *Forensic medicine – clinical and pathological aspects*. London: Greenwich Medical Media; 2003.
7. Scott-Ham M, Burton FC. Toxicological findings in cases of alleged drug-facilitated sexual assault in the United Kingdom over a 3-year period. *J Clin Forensic Med* 2005 Aug;12(4):175–86.
8. Jansen KL, Theron L. Ecstasy (MDMA), methamphetamine, and date rape (drug-facilitated sexual assault): a consideration of the issues. *J Psychoactive Drugs* 2006 Mar;38(1):1–12.
9. Negrusz A, Gaensslen RE. Analytical development in toxicological investigation of drug-facilitated sexual assault. *Anal Bioanal Chem* 2003;376:1192–7.
10. Hurley M, Parker H, Wells DL. The epidemiology of drug facilitated sexual assault. *J Clin Forensic Med* 2006;13:181–5.
11. LeBeau MA, Moyazani A. *Drug facilitated sexual assault: a forensic handbook*. London: Academic Press; 2001.
12. Association of Chief Police Officers. *Operation Matisse – investigating drug facilitated sexual assault*. Available from: [www.acpo.police.uk/asp/policies/DataOperatin%20Matisse%20report%20-%20press%20rel.%2084.doc](http://www.acpo.police.uk/asp/policies/DataOperatin%20Matisse%20report%20-%20press%20rel.%2084.doc); 2006.
13. Wolchover D, Heaton-Armstrong A. Debunking rape myths. *New Law J* 2008;158(7305).
14. Rape crisis network national statistics 2007 summary report. Available from: <http://www.rcni.ie/documents/RapeCrisisNetworkNationalStatistics2007SummaryReport.pdf>.
15. Garda recorded crime statistics 2003–2007. Central Statistics Office. Available from: [http://www.cso.ie/releasespublications/documents/crime\\_justice/2007/gardacrimestats\\_2007.pdf](http://www.cso.ie/releasespublications/documents/crime_justice/2007/gardacrimestats_2007.pdf); Feb 2009.
16. Jones AW, Kugelberg FC, Holmgren A, Ahlner J. Occurrence of ethanol and other drugs in blood and urine specimens from female victims of alleged sexual assault. *Forensic Sci Int* 2008;181:40–6.
17. McGee H, Garavan R, deBarra M, Byrne J, Conroy R. *The SAVI report. Sexual abuse and violence in Ireland*. Dublin, Ireland: The Liffey Press and The Dublin Rape Crisis Centre; 2002.
18. McGee H, Garavan R, Leigh C, Ellis C, Conroy R. *SAVI revisited*. Dublin, Ireland: The Liffey Press and The Dublin Rape Crisis Centre; 2005.
19. *Census 2006 – principal demographic results*. Dublin: Central Statistics Office; March 2007.
20. Slaughter L. Involvement of drugs in sexual assault. *J Reprod Med* 2000 May;45(5):425–30.
21. Hindmarch I, ElSohly M, Gambles J, Salamore S. Forensic urinalysis of drug use in cases of alleged sexual assault. *J Clin Forensic Med* 2001 Dec;8(4):197–205.
22. Hall JA, Moore CBT. Drug facilitated sexual assault – a review. *J Forensic Leg Med* 2008;15:291–7.
23. Hall JA, Goodall EA, Moore T. Alleged drug facilitated sexual assault (DFSA) in Northern Ireland from 1999 to 2005. A study of blood alcohol levels. *J Forensic Leg Med* 2008;15:497–504.
24. Beynon CM, McVeigh C, McVeigh J, Leavey C, Bellis MA. The involvement of drugs and alcohol in drug-facilitated sexual assault. A systematic review of the evidence. *Trauma, Violence, Abuse* July 2008;9(3):178–88.
25. Moeller KE, Lee KC, Kissack JC. Urine drug screening: practical guide for clinicians. *Mayo Clin Proc* 2008;83(1):66–76.
26. Zebelman AM, Troyer BL, Randall GL, Batjer JD. Detection of morphine and codeine following consumption of poppy seeds [letter]. *J Anal Toxicol* 1987;11(3):131–2.
27. *Acts of the UK Parliament. Mental capacity act, 2005*. Available from: [http://www.opsi.gov.uk/acts/acts2005/ukpga\\_20050009\\_en\\_1](http://www.opsi.gov.uk/acts/acts2005/ukpga_20050009_en_1); 7 April 2005.
28. Tadros V. Rape without consent. *Oxford J Leg Stud* 2006;26(3):449.
29. *Acts of the UK Parliament. Sexual offences act, 2003*. Available from: [http://www.opsi.gov.uk/acts/acts2003/ukpga\\_20030042\\_en\\_1.htm](http://www.opsi.gov.uk/acts/acts2003/ukpga_20030042_en_1.htm); 20 November 2003.
30. *Consultation paper on vulnerable adults and the law: consent*. LRC CP37–2005. Dublin, Ireland: The Law Reform Commission; May 2005.
31. Jacoby R. *Assessment of mental capacity: guidance for doctors and lawyers*. 2nd ed. London, U.K.: The British Medical Association and The Law Society, BMJ Books; 2004.
32. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. *Report: making health care decisions: the ethical and legal implications of informed consent in the patient–practitioner relationship*. Washington, DC: U.S. Government; 1982.
33. *Law commission consultation paper No. 231: mental incapacity*. London, U.K.: HMSO; 1995.
34. Gordon RM, Verdun-Jones SN. *Adult guardianship law in Canada*. Carswell; 1992.
35. R v. Bree [2007]. EWCA (Crim Div) 804, [2007]2 Crim. App. R13.
36. DPP v. Morgan [1975]2 All ER 411; (1975)61 Cr App R 136.
37. DPP v. Majewski [1975] AC 443, 2 All ER 142.
38. R v. Caldwell [1982] AC 341, [1981], All ER 961.
39. R v. Olugboja [1982] QB 320, [1981] 3 all ER 443.
40. R v. Dougal [2005] Trial abandoned.